WHAT IS CLAIMED IS:

1.   An optical system, having an object side and an image side, comprising, in order from an object side:

an iris diaphragm;

5   a first lens having a positive refractive power and at least one aspheric surface; and

a second lens having a negative refractive power and at least one aspheric surface,

the optical system satisfying the following conditional expression:

10

$$1.25 < \frac{L_T}{f} < 1.58$$

wherein L_T denotes the total length of the optical system from the object side to an image side; and f denotes the total focal length of the optical system.

2.   The optical system as claimed in claim 1, wherein the optical system

15   further satisfies the following conditional expression:

$$-1.5 < \frac{W_p - W}{W_p} < -0.1$$

wherein W_p is defined by $Tan^{-1}\left(\frac{y}{f}\right)$; W denotes the half angle of view for a maximum effective image circle; and y is the height of a maximum effective image.

20

3. The optical system as claimed in claim 1, wherein the optical system further satisfies the following conditional expression:

$$25 < Vd_1 - Vd_2 < 30$$

where Vd_1 denotes the Abbe's value of the d-line ray of the first lens; and Vd_2 denotes the Abbe's value for the d-line ray of the second lens.

4. The optical system as claimed in claim 1, wherein the first and second lenses respectively have an aspheric surface on both sides thereof.

5. The optical system as claimed in claim 1, wherein the second lens is a meniscus lens having a convex image side.

6. The optical system as claimed in claim 1, wherein the first lens is a lens having a convex image side.

7. An optical system, having an object side and an image side, comprising, in order from an object side:

an iris diaphragm;

a first lens having a positive refractive power and at least one aspheric surface; and

a second lens having a negative refractive power and at least one aspheric surface,

the optical system satisfying the following conditional expression:

$$-1.5 < \frac{W_p - W}{W_p} < -0.1$$

wherein W_p is defined by $Tan^{-1}\left(\frac{y}{f}\right)$; W denotes the half angle of view for a maximum effective image circle; and y is the height of a maximum effective image.   .

8. The optical system as claimed in claim 7, wherein the optical system further satisfies the following conditional expression:

$$25 < Vd_1 - Vd_2 < 30$$

where Vd_1 denotes the Abbe's value of the d-line ray of the first lens; and Vd_2 denotes the Abbe's value for the d-line ray of the second lens.

9. The optical system as claimed in claim 7, wherein the first and second lenses respectively have an aspheric surface on both sides thereof.

10. The optical system as claimed in claim 7, wherein the second lens is a meniscus lens having a convex image side.

11. The optical system as claimed in claim 7, wherein the first lens is a lens having a convex image side.

12. An optical system, having an object side and an image side, comprising, in order from an object side:

an iris diaphragm;

a first lens having a positive refractive power and at least one aspheric surface; and

a second lens having a negative refractive power and at least one aspheric surface,

the optical system satisfying the following conditional expression:

$$0.75 < \frac{f_B}{f} < 0.95$$

wherein f denotes the total focal length of the optical system; and f_B denotes the distance on the optical axis between the image side surface of the second lens and the image plane.

13. The optical system as claimed in claim 12, wherein the optical system further satisfies the following conditional expression:

$$\frac{|R_1|}{f} > 2.1$$

wherein R_1 denotes the curvature of the object side of the first lens.

14. The optical system as claimed in claim 12, wherein the optical system further satisfies the following conditional expression:

$$\frac{L_T}{f_B} < 2.4 \quad .$$

wherein L_T denotes the total length of the optical system from the object side to an image side.

31

15. The optical system as claimed in claim 12, wherein the optical system further satisfies the following conditional expression:

$$0.35 < \frac{t_2}{f} < 0.52$$

wherein t_2 denotes the thickness of the first lens.

16. The optical system as claimed in claim 12, wherein the optical system further satisfies the following conditional expression:

$$0.14 < \frac{t_4}{f} < 0.23$$

wherein t_4 denotes the thickness of the second lens.

17. The optical system as claimed in claim 12, wherein the optical system further satisfies the following conditional expression:

$$-1.5 < \frac{W_p - W}{W_p} < -0.02$$

wherein W_p is defined by $Tan^{-1}\left(\frac{y}{f}\right)$; W denotes the half angle of view for a maximum effective image circle; and y is the height of a maximum effective image.

18. The optical system as claimed in claim 12, wherein the first and second lenses respectively have an aspheric surface on both sides thereof.

19. The optical system as claimed in claim 12, wherein the second lens is a meniscus lens having a convex image side.

20. The optical system as claimed in claim 12, wherein the first lens is a lens having a convex image side.

21. An optical system, having an object side and an image side, comprising, in order from an object side:

an iris diaphragm;

a first lens having a positive refractive power and at least one aspheric surface; and

a second lens having a negative refractive power and at least one aspheric surface,

the optical system satisfying the following conditional expression:

$$-1.5 < \frac{W_p - W}{W_p} < -0.02$$

wherein W_p is defined by $Tan^{-1}\left(\frac{y}{f}\right)$; W denotes the half angle of view for a maximum effective image circle; and y is the height of a maximum effective image.

22. The optical system as claimed in claim 21, wherein the optical system further satisfies the following conditional expression:

$$\frac{|R_1|}{f} > 2.1$$

wherein R_1 denotes the curvature of the object side of the first lens.

23. The optical system as claimed in claim 21, wherein the optical system further satisfies the following conditional expression:

$$\frac{L_T}{f_B} < 2.4$$

wherein L_T denotes the total length of the optical system from the object side to an image side.

24. The optical system as claimed in claim 21, wherein the optical system further satisfies the following conditional expressions:

$$0.35 < \frac{t_2}{f} < 0.52$$

$$0.14 < \frac{t_4}{f} < 0.23$$

wherein t_2 denotes the thickness of the first lens, and t_4 denotes the thickness of the second lens.

25. The optical system as claimed in claim 21, wherein the first and second lenses respectively have an aspheric surface on both sides thereof.

34

26. The optical system as claimed in claim 21, wherein the second lens is a meniscus lens having a convex image side.

27. The optical system as claimed in claim 21, wherein the first lens is a lens having a convex image side.